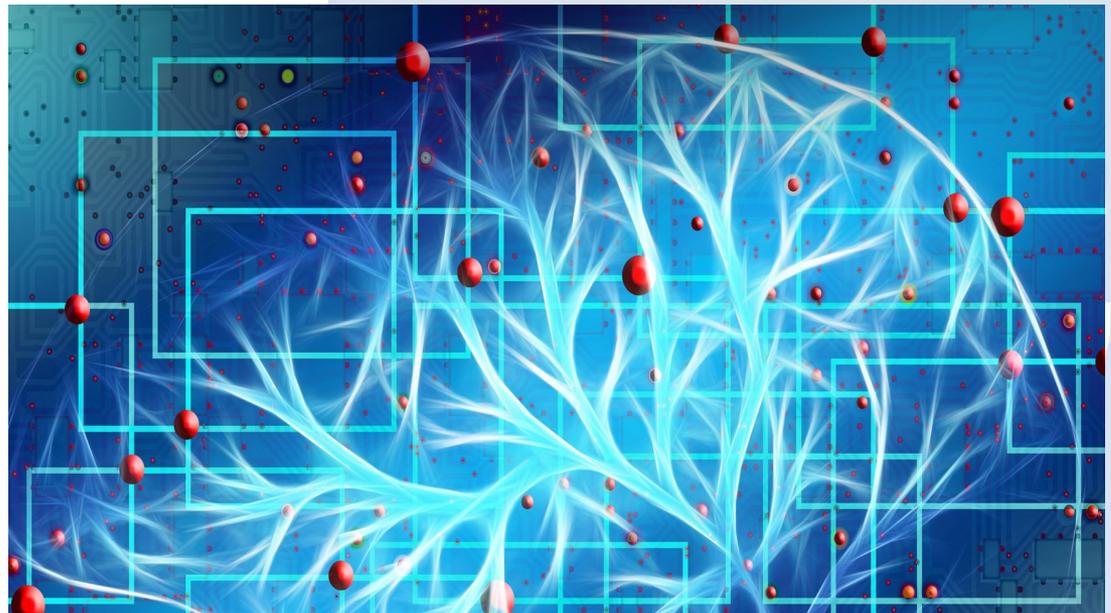




Neurocentro della Svizzera Italiana
Neurocenter of Southern Switzerland

Monitoraggio: il diario Parkinson, da “carta e penna” al rilevamento digitale



Brissago, 23 Marzo 2024

Dr. ssa med. Ilaria Bertaina

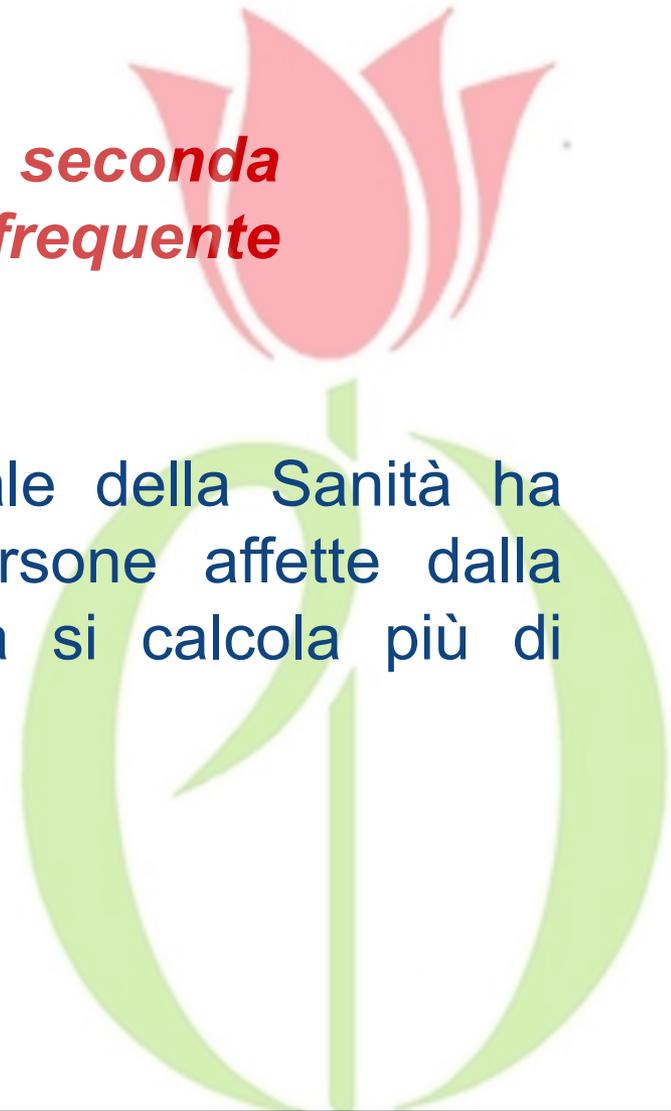
Monitoraggio – la clinica

- **La Malattia di Parkinson**
 - Sintomi *motori*
 - Sintomi *non motori*
- **Evoluzione nel tempo**
- **Le fluttuazioni cliniche**
- **Perché il monitoraggio clinico?**
- **Cosa monitorare e come**



Malattia di Parkinson

- La malattia di Parkinson è la **seconda malattia neurodegenerativa più frequente** dopo la malattia di Alzheimer
- Nel 2019 l'Organizzazione Mondiale della Sanità ha stimato più di **8.5 milioni** di persone affette dalla Malattia di Parkinson; in Svizzera si calcola più di **15000**.
- La **diagnosi** è prettamente **clinica**



Sintomi motori

Sintomi motori

- **Bradicinesia**
- **Rigidità muscolare (ipertono plastico)**
- **Tremore a riposo (assente nel 20% dei pazienti)**
- **Alterazioni posturali e dell'equilibrio**



Table 2. Motor and Nonmotor Symptoms and Signs of Parkinson Disease

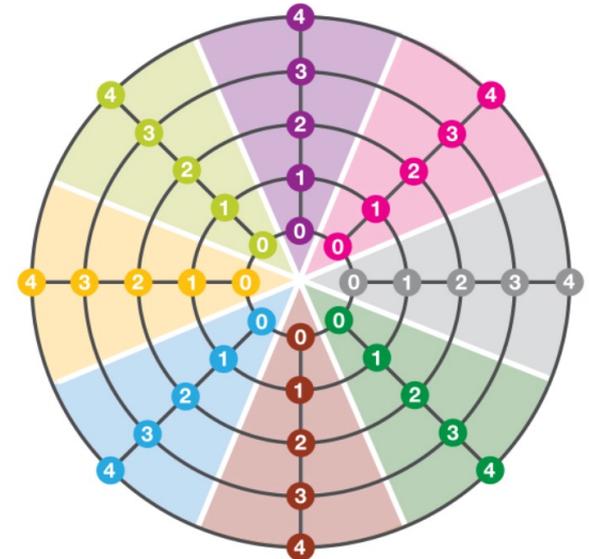
| Symptom or Sign | Definition or Key Elements |
|----------------------------------|--|
| Motor | |
| <u>Bradykinesia</u> ^a | Slowness and progressively smaller movements (hypokinesia) as an individual repeats a task (eg, tapping index finger and thumb, opening and closing fist) multiple times in a row |
| <u>Rigidity</u> ^a | Involuntary, velocity-independent resistance to passive movement of a joint (eg, elbow, wrist) by an examiner, with or without a cogwheel phenomenon |
| <u>Rest tremor</u> ^a | A 4- to 6-Hz tremor in a fully resting limb, which temporarily disappears when the limb is held outstretched and then returns (reemergent tremor) and is not present during movement |
| <u>Postural instability</u> | Balance impairment affecting a person's ability to change or maintain postures such as walking or standing; typically a late Parkinson disease feature |

Diagnosis and Treatment of Parkinson Disease: A Review. **JAMA** 2020

Sintomi *non* motori

Sintomi non-motori

- Alterazione **olfatto**
- Disturbi **autonomici** e gastroenterici
- Disturbi del **sonno**
- Alterazione del **tono dell'umore**
- Altri



Nonmotor

| | |
|---------------------------------|--|
| <u>Olfactory</u> loss | Decreased or absent sense of smell (hyposmia) |
| <u>Sleep</u> dysfunction | Symptoms of rapid eye movement sleep behavior disorder, daytime sleepiness, sleep-maintenance insomnia |
| <u>Autonomic dysfunction</u> | Constipation, delayed gastric emptying, urinary urgency and frequency, erectile dysfunction, orthostatic hypotension, blood pressure variability |
| <u>Psychiatric disturbances</u> | Depression, anxiety, apathy, psychosis |
| <u>Cognitive</u> impairment | Mild cognitive impairment or dementia, often initially affecting attention, executive, and visuospatial functions |
| <u>Other</u> | Fatigue, hypophonia (softening of the voice), sialorrhea, trouble swallowing |

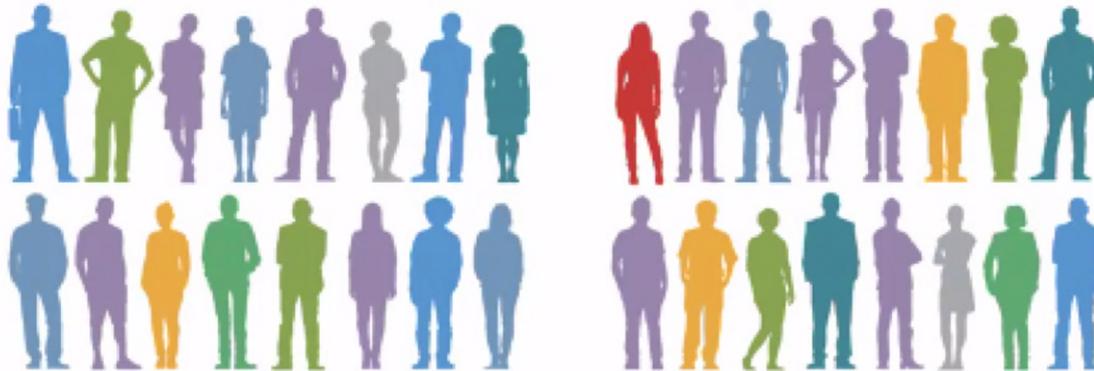
Diagnosis and Treatment of Parkinson Disease: A Review. **JAMA** 2020

Unicità

- Ogni storia clinica è a sé
- **Tante malattie di Parkinson**

Parkinson's is different for everyone

Every individual's experience with Parkinson's is different.



- No two people with Parkinson's disease will experience the condition the same way, so everyone's treatment will be unique to them.

Evoluzione clinica

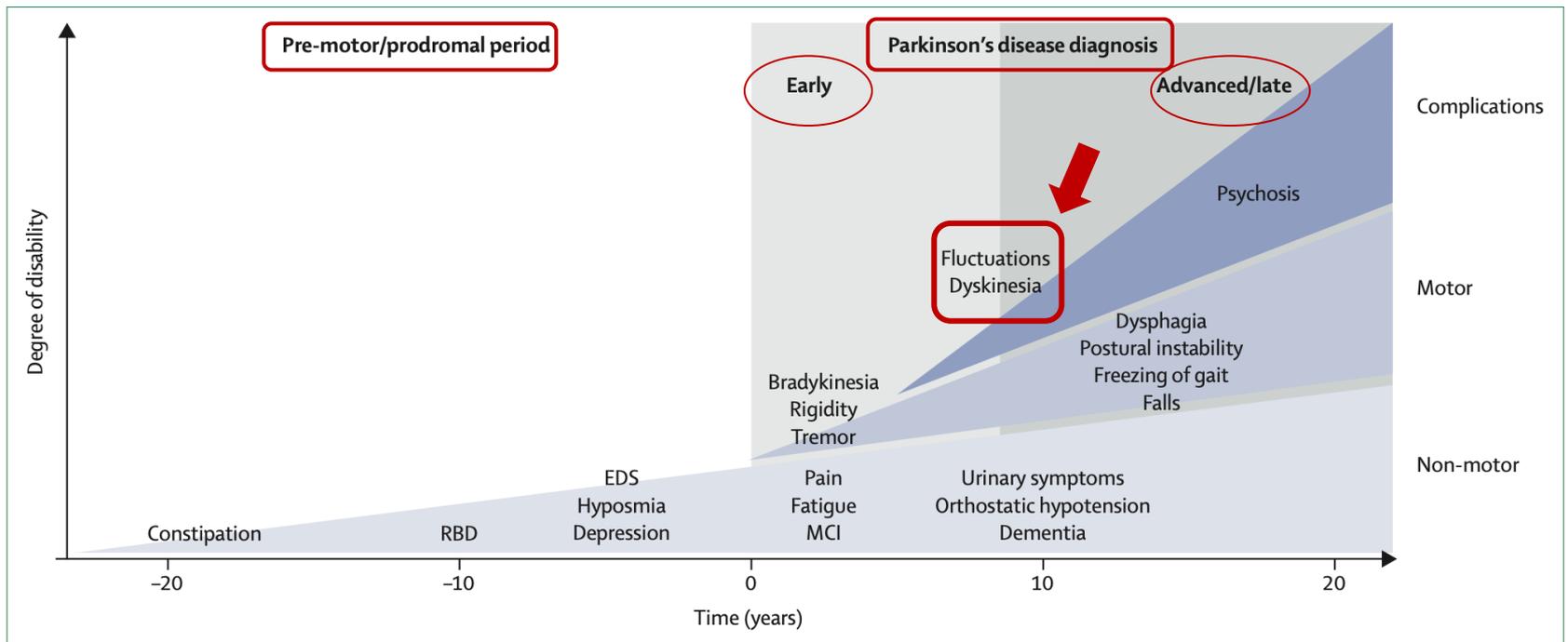
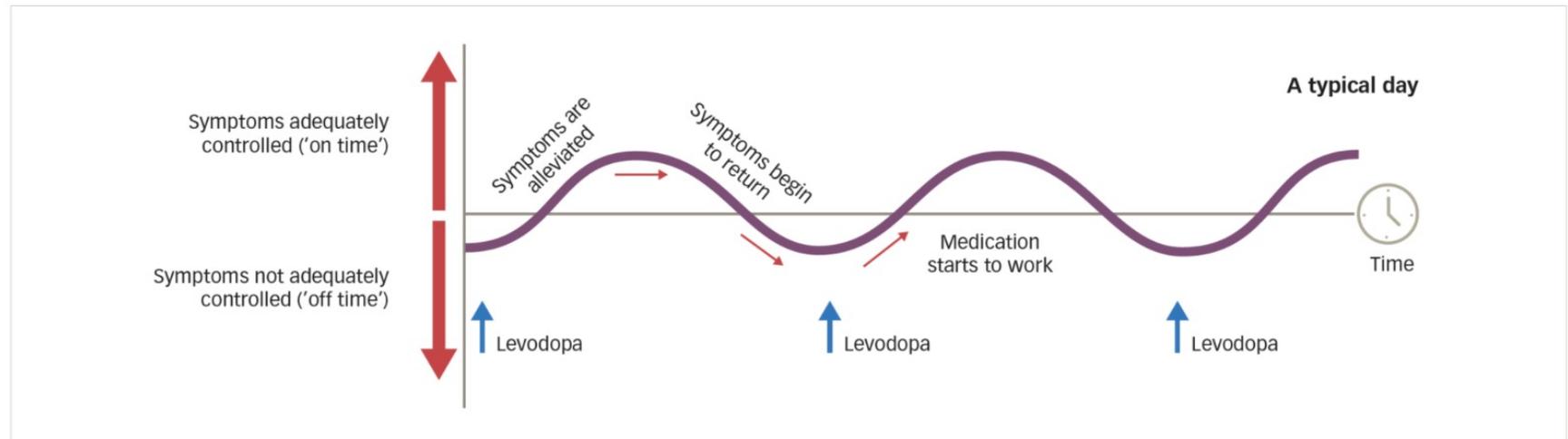


Figure 1: Clinical symptoms and time course of Parkinson's disease progression

Parkinson's Disease, Kalia and Lang, Lancet 2015

Fluttuazioni cliniche

Figure 2: Illustration of levodopa pharmacokinetics and wearing-off period over time⁵



Adapted with permission from Stocchi, 2006.⁵

F. Stocchi Expert Opin. Pharmacother. (2006) 7(10)

Fluttuazioni cliniche

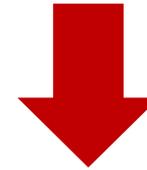
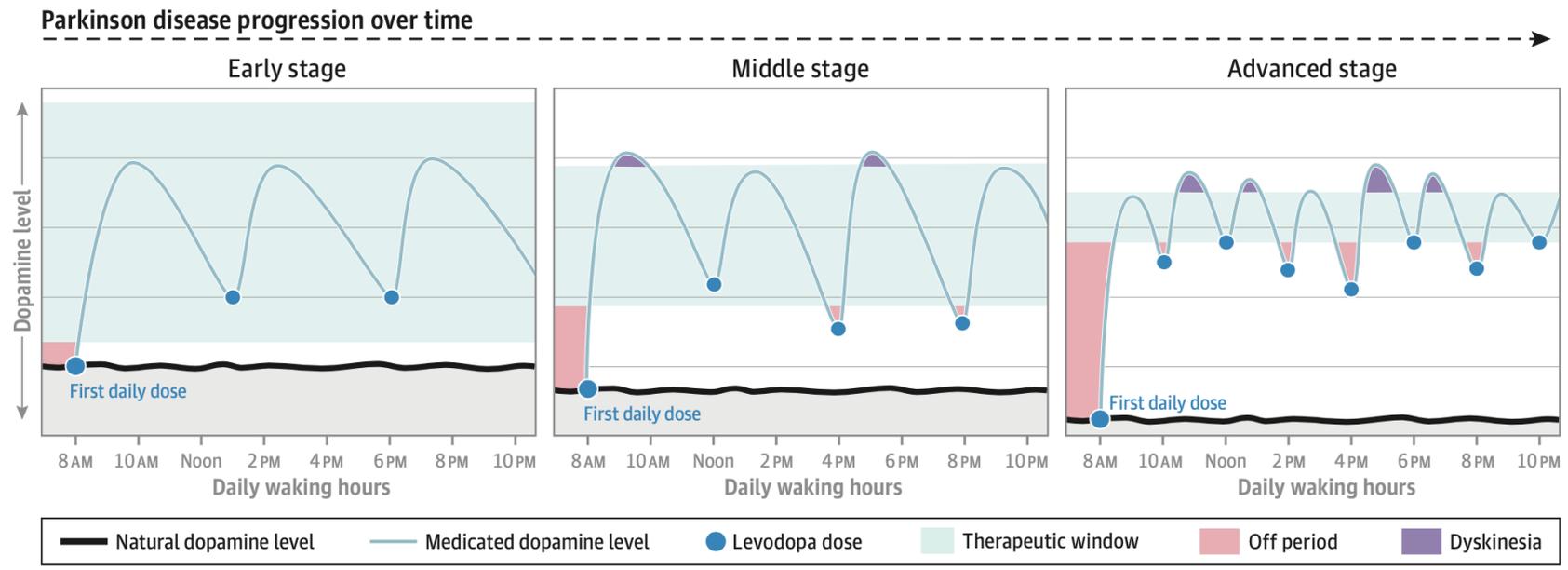


Figure 3. The Interaction Between Medication Dosing, Wearing Off, and Dyskinesias Over Time



Armstrong et al. Diagnosis and Treatment of Parkinson Disease: A Review. **JAMA** 2020

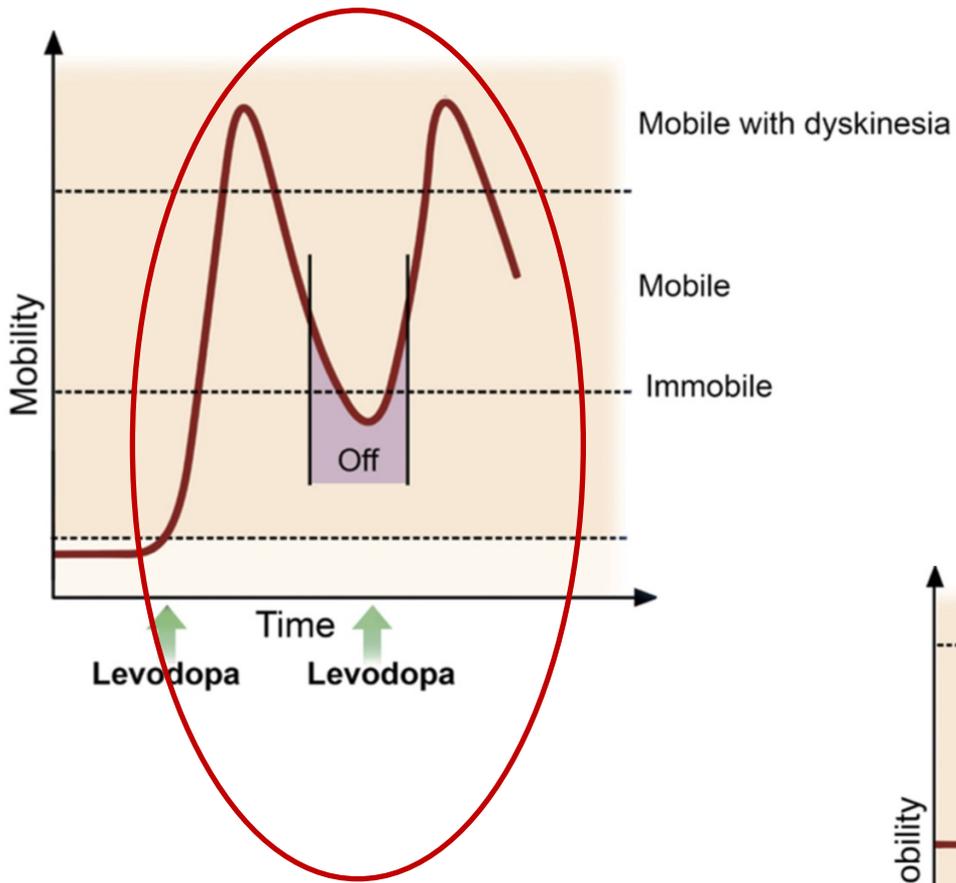
Monitoraggio

- Imparare a *conoscersi*
- Saper *descrivere* i propri sintomi
- Utilizzare un *linguaggio comune*
- **Identificare** gli aspetti da monitorare con un **obiettivo comune**

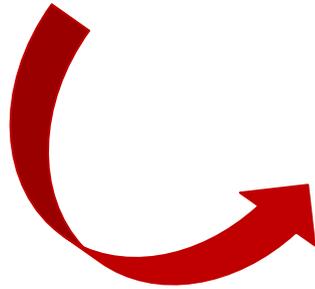
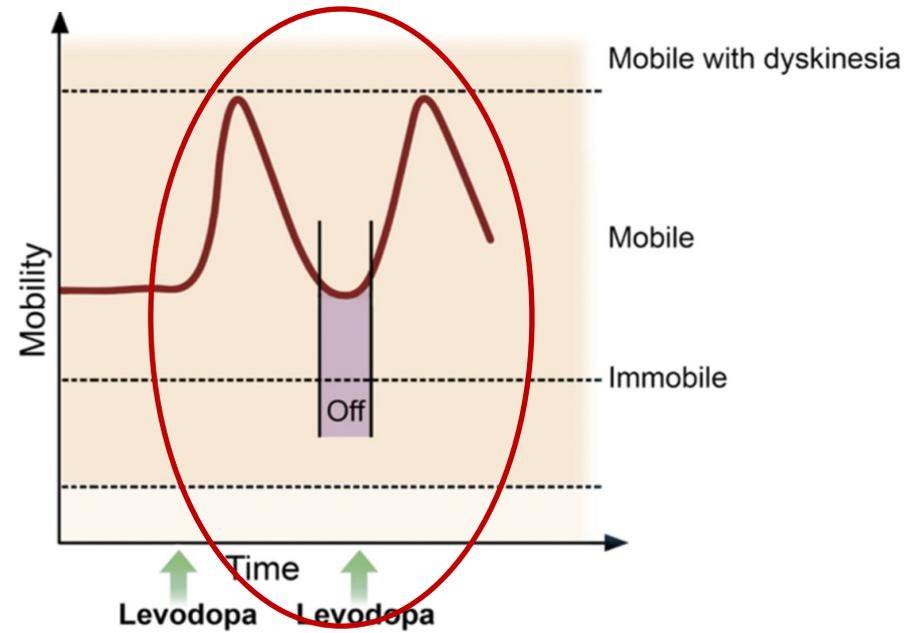
- **Educazione** fin dall'esordio di malattia e **Comunicazione**



Lavoro di squadra



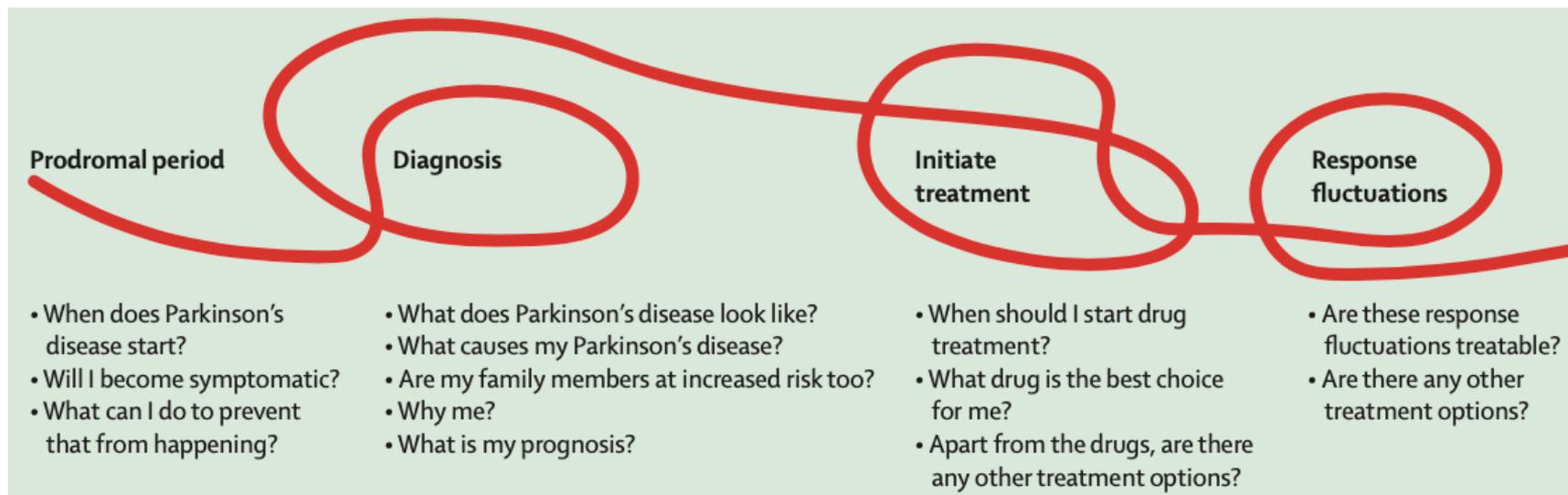
Finestra terapeutica



P. Hickey et al. Frontiers Neurosc 2016

Filo conduttore

- Seguire l'evoluzione clinica
- L'importanza di identificare i punti da migliorare per sviluppare un piano terapeutico adeguato -- > **conoscenza, educazione e comunicazione**



Modificato da Parkinson's Disease, Bloem et al, Lancet 2021

COME monitorare ?

